IN THE SPECIFICATION

(First paragraph of the Detailed Description, page 5, lines 24-32) (amended)

As shown in Fig. 1, a mixer/flow conditioner, generally referred to by the reference number 10, is comprised of three approximately concentric cylindrical partitions 12 successively positioned one inside the other. Each pair of successive partitions 12 defines a gap 14 therebetween. A strip 16 is positioned in each gap 14 and together with the partitions 12 defines a plurality of passages 18. Each passage 18 has an entrance 20, an exit 22, and a length 24. The orientation of the passages 18 is generally indicated by the arrows 26A and 26B. Moreover, the location of each passage 18 relative to a central axis 27 is generally indicated by a position vector 28, taken perpendicular to the central axis 27.

(Second paragraph of the Detailed Description, page 6, lines 1-10) (amended)

~~In the illustrated embodiment, the passages 18 within a gap 14 are~~ approximately of equal size (length, entrance hydraulic diameter (two times the cross-sectional area divided by the wetted perimeter), and exit hydraulic diameter) and shape. The passages 18 in an inner gap 30 have an orientation indicated by the arrow 26A such that a fluid passing therethrough will be given a velocity component tangential to a circle defined by the position vector 28 thereby adopting a counter-clockwise rotation. The passages 18 in an outer gap 32 have an orientation indicated by the arrow 26B such that a fluid passing therethrough will be given a velocity component tangential to a circle defined by the position vector 28 thereby adopting a clockwise rotation.

(Third paragraph of the Detailed Description, page 6, lines 12-19) (amended)

Whether an orientation ~~26~~ of passage 18 imparts a tangential velocity component is explained using a standard x, y, and z coordinate system, shown in Fig. 1 with the x axis positioned on the central axis 27. Any orientation ~~26~~ with a component resolvable into a y coordinate having a non-zero value is considered to impart a velocity component that is tangential. An individual passage 18 oriented such that that passage has no orientation with a resolvable component in the y coordinate, i.e. an angle only in the x-z plane, imparts no tangential velocity component to a packet passing therethrough.

(Fourth paragraph of the Detailed Description, page 6, lines 21-27) (amended)

The orientation of the passages 18 of the inner gap 30 and outer gap 32 cooperate to convert an initial flow stream 34 into a final flow stream 36 having a turbulent profile and a swirl number (swirl number is equal to two times the axial flux of angular momentum divided by the product of the axial thrust and the swirler diameter) less than about 0.2 in the case of mixing and less than about 0.03 in the case of flow conditioning. Where the passages of two adjacent gaps work together such that the gaps taken as a unit produce the desired swirl number, the adjacent gaps are said to be working in pairs.

(Seventh paragraph of the Detailed Description, page 7, lines 11-23) (amended)

The passages 18, however, in the inner gap 30 and the outer gap 32 vary in tangential orientation ~~26~~, such that the packets 38 in the inner gap 30 upon exiting passages 18 have a counter-clockwise rotation and the packets 38 in the outer gap 32 have a clockwise rotation. Therefore, when a packet 38 exits a passage 18, the packet 38 leaves the passage 18 having a angular momentum (the cross product of a position vector of the passage ~~26~~ 18, the mass of the packet, and the tangential velocity component of the packet 38). Depending upon which gap 14 the passage 18 is located in, the angular momentum is either positive or negative (based on an arbitrary assignment of clockwise or counter-clockwise as positive). Where the initial flow stream 30 has a uniform velocity profile, the sum of the angular momenta for all the exiting packets 38 is approximately equal to zero, thus achieving in a final flow stream 36 (the recombination of all packets 38) having the desired turbulent flow with the desired swirl number.

(Eleventh paragraph of the Detailed Description, page 8, lines 22-33) (amended)

Each passage 18 entrance 20 defines a hydraulic diameter and the exits 22 define a downstream face 42. It is preferred the length 24 to the hydraulic diameter ratio range between a low of approximately 0.5 and a high of approximately 10. At a length 24 to hydraulic diameter ratio greater than 10, pressure drop becomes a significant issue. The orientation ~~26~~ tangential to the downstream face 42 of a passage 18, irrespective of clockwise or counter-clockwise, can range from just over zero degrees to 80 degrees (measured from the x axis in the x-y plane); if the orientation ~~26~~ were zero degrees there would be no tangential component. Two opposite orientations ~~26~~ can define an included angle that is the sum of the absolute

value of the orientation ~~26~~ in the tangential direction between any pair of oppositely oriented passages 18. The included angle should be greater than about 15 degrees but less than about 60 degrees.